

# THE TREATMENT OF THE BED SORE BY ULTRA-VIOLET RAYS.

By THOMAS J. LYALL,  
*Perth*

The treatment of the bed sore is usually regarded as lying within the province of the nursing profession, but electrotherapeutic measures can help considerably in the healing of those sores which can be described as sluggish ulcers.

It is advisable to arrange a team of two physiotherapists to deal with ward work, as heavy patients may be encountered and sores may be in awkward positions. A properly laid-out trolley is required and a properly tested source of ultra-violet rays is kept solely for this kind of work; this is advisable to ensure accuracy of dosage.

The sore is thoroughly cleansed with sterile water or hydrogen peroxide; all the discharge, crusts, and pieces of loose skin

are removed. A tracing is then made on cellophane which is labelled as to orientation and is filed. The condition of the sore will determine the plan of action. A very indolent sore with blackened base will require a very strong reaction to kill devitalized cells and to stimulate those underneath. A fifth degree erythema may be required in such a case to give a definite result; lesser dosage might be useless. If the base alone is very indolent but the sides and surrounding tissues show signs of stimulation, a very strong dose may be given to the base through a hole cut in cellophane while the remainder of the wound receives a milder dose due to the filtering of the shorter rays by the cello-

phane. Less severe cases require less drastic treatment—usually a third or a second degree erythema dose to stimulate healing. The area of tissue around the wound should also be given a mildly erythematous dose. It must be stressed that to obtain the best results in a very sluggish wound strong dosage must be given.

The dressing of the sore is very important. The requirements are: sterile paraffin, cod-liver oil, olive oil or eusol emulsion; viscopaste or some similar preparation; gauze, cotton wool, and elastoplast. The viscopaste is cut into suitable strips and is soaked in the oil; this is essential to prevent the dressing from sticking to the wound and damaging new epithelium and granulations when it is removed. The wound is packed firmly with the oily viscopaste and it is then covered with a square of oiled viscopaste and two thicknesses of non-oiled viscopaste. Gauze is then placed over the area and elastoplast is applied under tension. The whole dressing must be made as firm as possible to avoid shifting of the packing. Cotton wool is applied to cover a wide surface in case it is needed to absorb discharge.

The dressed sore may be left untouched for as long as a week if there is not any discharge or disturbance of the packing; but, of course, the dressing must be examined each day. When the dressing is removed the wound is cleansed again and another tracing is made and is filed. If the area has diminished and there are signs of revitalization, the erythematous dosage is reduced appropriately and the packing is applied again. As the sore heals and the dosage is reduced, treatment may be given more frequently; it must be kept in mind, however, that removal of the dressings too frequently may damage the new tissues.

As a precautionary measure, mild erythematous doses may be applied to any area which is subjected to pressure. The ultra-violet ray treatment may be combined with short-wave diathermy or infra-red ray therapy, especially when the sore is painful.

It may be superfluous to state that the cooperation of the nursing staff is essential to obtain the best results, and that during treatment precautions must be taken to preserve sterility and to avoid the introduction of infection.